WHAT IS CLAIMED IS:

1. A method of determining concentration of non-LDL cholesterol in a whole blood sample using a dry phase test strip, comprising:

(a) contacting the whole blood sample with a blood separation layer of the test strip and separating the blood cells from the sample, thereby producing plasma;

(b) contacting the plasma passing through the blood separation layer with a test layer and reacting the non-LDL fraction substantially faster than the LDL fraction to produce a color in the test layer substantially in proportion to the concentration of non-LDL cholesterol in the sample; and

(c) measuring the color produced in step (b).

2. The method of claim 1, wherein steps (a) - (c) are conducted at room temperature.

3. The method of claim 1, wherein step (c) is initiated by an end-point algorithm.

4. A test strip (20) for determining the concentration of LDL cholesterol in a sample of whole blood or plasma, comprising:

(a) a test strip matrix (36) having at least two stacks (92, 94);

(b) a first of said stacks (92) having reagents incorporated therein to produce a colorimetric response in proportion to the amount of total cholesterol in the sample; and

(c) a second of said stacks (94) having reagents incorporated therein to produce a colorimetric response in proportion to the amount of non-LDL cholesterol in the sample,

whereby, the value of non-LDL cholesterol obtained from said second of said stacks can be subtracted from the value of total cholesterol obtained from said first of said stacks to yield the value of LDL cholesterol in the sample.

5. A test strip (20) for determining the concentration of non-LDL cholesterol in a sample of whole blood or plasma, comprising:

a test strip matrix (36) having at least two layers (40, 42) facing and in fluid communication with one another;

a first of said layers (40) separating blood cells from plasma; and

a second of said layers (42) having reagents incorporated therein to produce a colorimetric response in proportion to the amount of non-LDL cholesterol in a sample of plasma delivered thereto.

6. The test strip of claim 5, wherein said second layer includes a surfactant that acts on non-LDLs.

7. The test strip of claim 6, wherein said surfactant includes emulgen B66.